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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,208	09/19/2001	Masahiro Kawasaki	P21043	8679

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EXAMINER

SMITH, ARTHUR A

ART UNIT PAPER NUMBER

2851

DATE MAILED: 10/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/955,208

Applicant(s)

KAWASAKI ET AL.

Examiner

Arthur A Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

(e) the invention was described in–

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Fukui et al. (USPN 6404987).

Fukui et al. discloses a flash photography system having a camera body, a main flash device, ref. MS, and at least one sub-flash device, ref. SS, wherein said main flash device emits at least one low flash emission serving as a main-flash emission command signal to transmit said main-flash emission command signal to said at least one sub-flash device, col. 16 lines 26-39. Fukui et al. also discloses at least one sub-flash device emitting a flash emission in accordance with said main-flash emission command signal, col. 16 lines 53-56. Fukui et al. further discloses that the flash photography system comprises: a designating device, ref. 241, for designating a flash emission mode of a main-flash emission, col. 16 lines 15-20. Fukui et al. discloses a command device, ref. 238, which activates the main flash where the main flash device emits the least one

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low flash emission serving as said main-flash emission command signal to transmit said main-flash emission command signal to said at least one sub-flash device in a manner corresponding to the designated flash emission mode, col. 24 line 62 - col. 25 line 237.

In reference to claims 2 and 3, Fukui et al. discloses wherein said main flash device comprises a built-in flash and an external flash device which is electrically connected to said camera body, see figs. 1 and 4a.

In reference to claim 4, Fukui et al. discloses wherein said sub-flash device comprises a slave flash unit which is controlled by said main flash device by wireless control, col. 14 lines 29-30.

In reference to claims 5, Fukui discloses where the designating device and the command device are incorporated in the main flash device, see fig. 3 ref. 28 and 241 respectively.

In reference to claim 7, Fukui et al. wherein said flash emission mode comprises a uniform flash emission mode in which said at least one sub-flash device is driven to emit a rapid series of short flash pulses to thereby emit said main flash emission with a substantially uniform intensity for a given period of time; wherein, in the case where said uniform flash emission mode is designated by said designating device, said command device activates said main flash device to emit at least two low flash emissions successively serving as said main-flash emission command signal; and wherein a time interval between two low flash emissions of said at least two low flash emissions designates a duration of time of said main flash emission in said uniform flash emission mode, col. 22 lines 43-59.

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In reference to claim 8, Fukui et al. discloses wherein said flash emission mode comprises a normal flash mode in which said at least one sub-flash device is driven to emit a single flash emission to thereby emit said main flash emission; and wherein said command device activates said main flash device to emit a single low flash emission serving as said main-flash emission command signal in the case where said normal flash mode is designated by said designating device, col. 22 line 60 - col. 23 line 12.

In reference to claim 9, Fukui et al. discloses wherein said command device activates said main flash device to transmit said main-flash emission command signal to said at least one sub-flash device after activating said main flash device to emit another at least one low flash emission to transmit another command signal, corresponding to the flash emission mode designated by said designating device, to said at least one sub-flash device; wherein each said at least one sub-flash device comprises: a receiver which receives signals which are transmitted from said command device; a setting device which sets a flash emission mode corresponding said another command signal received by said receiver; and a controller which activates said at least one sub-flash device to emit said main flash emission in said flash emission mode set by said setting device upon said receiver receiving said main-flash emission command signal which corresponds to said flash emission mode set by said setting device, col. 32 line 51 - col. 33 line 7.

In reference to claims 10 and 11, Fukui et al. discloses wherein said command device activates said main flash device to transmit said pre-flash emission command signal, a light-magnification command signal, and said main-flash emission command

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signal to said at least one sub-flash device successively in that order to control a flash emission of said at least one sub-flash device; wherein said pre-flash emission command signal commands said at least one sub-flash device to start emitting a preliminary flash emission before said main flash emission; and wherein said light-magnification command signal specifies a light amount of said main flash emission of said at least one sub-flash device, col. 33 line 57- col. 35 line 10..

In reference to claims 12 and 13, Fukui et al. wherein said main flash device comprises a first CPU which can have data communication with a second CPU, ref. 100, provided in said camera body, said first CPU serving as said command device, col. 11 lines 50-60.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki (USPN 5721971).

Sasaki discloses a flash photography system having a camera body, a main flash device, ref. 15, and at least one sub-flash device, ref. 11, wherein said main flash device emits at least one low flash emission serving as a main-flash emission command signal to transmit said main-flash emission command signal to said at least one sub-

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flash device, col. 5 lines 41-54. Sasaki also discloses at least one sub-flash device emitting a flash emission in accordance with said main-flash emission command signal, col. 5 lines 54-61. Sasaki further discloses that the flash photography system comprises: a designating device for designating a flash emission mode of a main-flash emission, col. 5 line 63 - col. 6 line 2. Sasaki does not specifically disclose the command device, such as a CPU, which activates the main flash. However, it would be obvious to one of ordinary skill in the art at the time the invention was made to realize that such a command device was inherent in the camera. Such a command device would have to be inherent since Sasaki discloses where the main flash device emits the least one low flash emission serving as said main-flash emission command signal to transmit said main-flash emission command signal to said at least one sub-flash device in a manner corresponding to the designated flash emission mode, col. 6 lines 2-7.

In reference to claim 2, Sasaki discloses wherein said main flash device comprises a built-in flash of said camera body, ref. 15.

In reference to claim 3, Sasaki discloses wherein said main flash device comprises an external flash device which is electrically connected to said camera body, col. 1 lines 13-14. The electrical connection to the camera body could be through a "hot shoe."

In reference to claim 4, Sasaki discloses wherein said sub-flash device comprises a slave flash unit which is controlled by said main flash device by wireless control, col. 3 lines 50-53.

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In reference to claims 5, 6, 12 and 13, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the designating device and said command device are in the main flash device. This modification would be a design choice since the main flash device could function equally as well if the designating device and the command device were instead incorporated in the camera body.

In reference to claim 8, Sasaki discloses wherein said flash emission mode comprises a normal flash mode in which said at least one sub-flash device is driven to emit a single flash emission to thereby emit said main flash emission; and wherein said command device activates said main flash device to emit a single low flash emission serving as said main-flash emission command signal in the case where said normal flash mode is designated by said designating device, col. 5 line 63 - col. 6 line 7.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yanai et al. (USPN 6088542) also discloses a master/slave flash control system.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arthur A Smith whose telephone number is (703) 605 1228. The examiner can normally be reached on Monday - Thursday from 8:00 AM to 5:30 PM. The examiner can also be reached on alternate Fridays during the same hours.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (703) 308 2847. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872 9318 for regular communications and (703) 872 9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

AAS
October 1, 2002


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